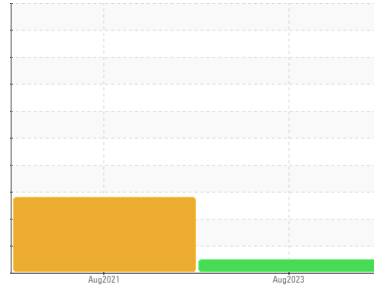




GREASE ANALYSIS

Sample Rating Trend



NORMAL



Area
Saugen Shores SP-17701
 Machine ID
11K06
 Component
Grease
 Fluid
SKF LGWM 1 (--- LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Grease Condition

The condition of the grease is acceptable for the time in service.

Contaminants

There is no indication of any contamination in the grease.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|-----------------|-------------|-------------|--------------------|-------------|----------|
| Sample Number | Client Info | | PP0835307 | PP0546461 | --- |
| Sample Date | Client Info | | 20 Aug 2023 | 25 Aug 2021 | --- |
| Machine Age | yrs | Client Info | 0 | 0 | --- |
| Grease Age | yrs | Client Info | 0 | 0 | --- |
| Grease Serviced | Client Info | | Not Chngd | N/A | --- |
| Sample Status | | | NORMAL | ABNORMAL | --- |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|-------------|---------------|----------|--------------|----------|
| PQ | ASTM D8184* | >200 | 0 | ▲ 8370 | --- |
| Iron | ppm | ASTM D5185(m) | >250 | <1 | ▲ 573 |
| Chromium | ppm | ASTM D5185(m) | >10 | 0 | 2 |
| Nickel | ppm | ASTM D5185(m) | >5 | 0 | <1 |
| Cadmium | ppm | ASTM D5185(m) | | 0 | 0 |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 |
| Lead | ppm | ASTM D5185(m) | >25 | 0 | 0 |
| Copper | ppm | ASTM D5185(m) | >75 | 0 | 1 |
| Tin | ppm | ASTM D5185(m) | >5 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | >5 | <1 | 0 |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|---------------|---------|--------------|----------|
| Boron | ppm | ASTM D5185(m) | 0 | <1 | 2 |
| Magnesium | ppm | ASTM D5185(m) | 0 | 0 | <1 |
| Manganese | ppm | ASTM D5185(m) | 0 | 0 | 5 |
| Molybdenum | ppm | ASTM D5185(m) | 0 | 0 | <1 |
| Phosphorus | ppm | ASTM D5185(m) | 5 | 3 | 17 |
| Zinc | ppm | ASTM D5185(m) | 20 | 8 | 27 |
| Antimony | ppm | ASTM D5185(m) | 0 | 0 | <1 |

THICKENER/SOAP

| | method | limit/base | current | history1 | history2 |
|----------|--------|---------------|---------|------------|----------|
| Aluminum | ppm | ASTM D5185(m) | 0 | 0 | <1 |
| Barium | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Calcium | ppm | ASTM D5185(m) | 40 | 6 | 51 |
| Sodium | ppm | ASTM D5185(m) | 2 | 2 | 2 |
| Lithium | ppm | ASTM D5185(m) | 120 | 74 | 171 |
| Sulfur | ppm | ASTM D5185(m) | 650 | 506 | 688 |

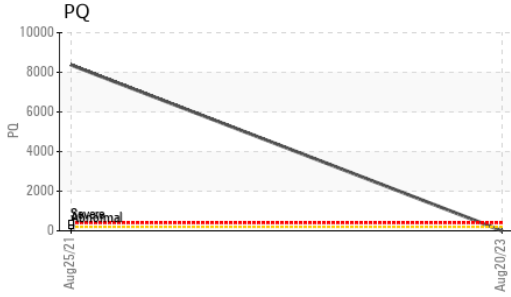
CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|---------------|---------|----------|----------|
| Silicon | ppm | ASTM D5185(m) | >150 | 0 | 9 |
| Potassium | ppm | ASTM D5185(m) | | 0 | <1 |

GREASE CONDITION

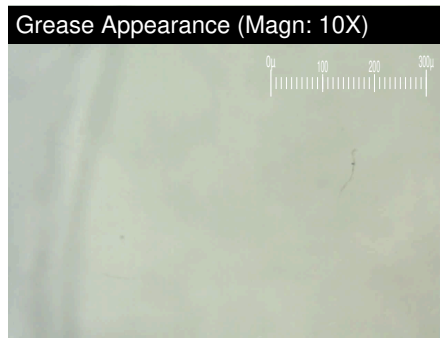
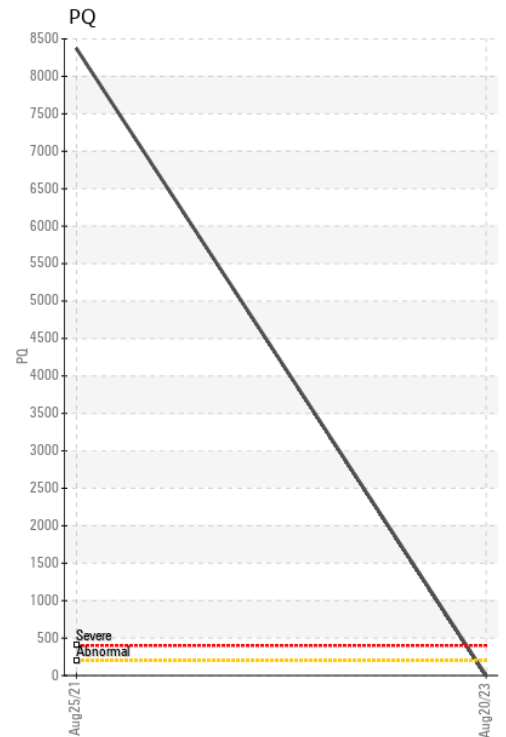
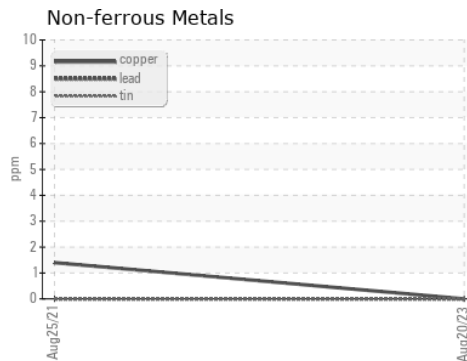
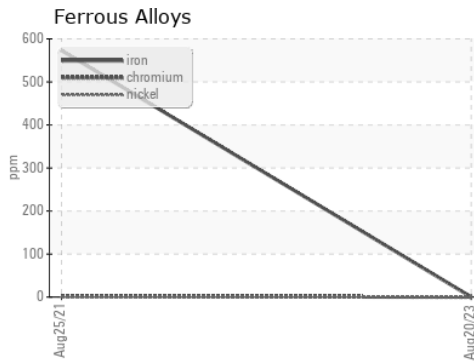
| | method | limit/base | current | history1 | history2 |
|------------------|------------------------|------------|----------------|-------------|----------|
| Grease Color | Visual* | Brown | Brown | Brown | --- |
| Texture | In-house* | | Buttery | Short fiber | --- |
| NLGI Consistency | NLGI Scale SKF Method* | 1 | 1 | 1 | --- |

GREASE ANALYSIS



| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
| Color | | | | | no image |
| Bottom | | | | | no image |
| PrtFilter | | | | | no image |

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Vestas American Wind Technology Inc.
Sample No. : PP0835307 **Received** : 24 Oct 2023
Lab Number : **02591579** **Diagnosed** : 30 Oct 2023
Unique Number : 5668658 **Diagnostician** : Bill Quesnel
Test Package : GRS 1 (Additional Tests: BottomAnalysis)

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

1417 NW Everett Street
 Portland, OR
 US 97209
 Contact: Eric German
 erger@vestas.com
 T: (519)368-7500
 F: (519)368-7535